

What is claimed is:

- 1 1/ An aqueous dispersed polymeric composition for preparing a spill resistant carpet
2 backing comprising:
 - 3 a. an aqueous dispersed polymeric material;
 - 4 b. an inorganic filler; and
 - 5 c. a hydrophobic compound selected from the group consisting of a hydrophobic
6 acid, a salt of a hydrophobic acid, and mixtures thereof.
- 1 2. The aqueous dispersed polymeric composition of Claim 1, wherein the aqueous
2 dispersed polymeric material is selected from the group consisting of a polyurethane
3 dispersion, a styrene-butadiene latex, a butadiene-acrylonitrile latex, an ethylene-vinyl
4 acetate latex, a styrene-butadiene-butyl acrylate latex, a chloroprene latex, a
5 polyethylene copolymer latex, an ethylene-styrene latex, a styrene-butadiene-
6 vinylidene chloride latex, a styrene-alkyl acrylate latex, a vinyl latex, an acrylic latex,
7 and mixtures thereof.
- 1 3. The aqueous dispersed polymeric composition of Claim 2, wherein the inorganic filler
2 is selected from the group consisting of calcium carbonate, calcium sulfate, kaolin,
3 lignite fly ash, silica, talc, feldspar, mica, glass spheres, wollastonite, aluminum
4 trihydrate, aluminum oxide, fiber glass, and mixtures thereof.
- 1 4. The aqueous dispersed polymeric composition of Claim 3, wherein the hydrophobic
2 compound is selected from the group consisting of butyric acid, hexanoic acid,
3 octanoic acid, decanoic acid, dodecanoic acid, lauric acid, myristic acid, palmitic acid,
4 oleic acid, linoleic acid, stearic acid, linolenic acid, gum rosin, wood rosin, tall oil

rosin, abietic acid, oxidized polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers, ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid, fumaric acid, acrylic acid, and salts thereof.

5. The aqueous dispersed polymeric composition of Claim 4, wherein the aqueous dispersed polymeric material is a polyurethane dispersion, the inorganic filler is calcium carbonate, and the hydrophobic salt is zinc stearate.

6. An aqueous dispersed polymeric composition for preparing a spill resistant carpet backing comprising:

- a. an aqueous dispersed polymeric material; and
- b. a treated inorganic filler, having been treated with a hydrophobic compound selected from the group consisting of a hydrophobic acid, a salt of a hydrophobic acid, and mixtures thereof.

7. The aqueous dispersed polymeric composition of Claim 6, wherein the aqueous dispersed polymeric material is selected from the group consisting of a polyurethane dispersion, a styrene-butadiene latex, a butadiene-acrylonitrile latex, an ethylene-vinyl acetate latex, a styrene-butadiene-butyl acrylate latex, a chloroprene latex, a polyethylene copolymer latex, an ethylene-styrene latex, a styrene-butadiene-vinylidene chloride latex, a styrene-alkyl acrylate latex, a vinyl latex, an acrylic latex, and mixtures thereof.

8. The aqueous dispersed polymeric composition of Claim 7, wherein the inorganic filler is selected from the group consisting of calcium carbonate, calcium sulfate, kaolin,

lignite fly ash, silica, talc, feldspar, mica, glass spheres, wollastonite, aluminum trihydrate, aluminum oxide, fiber glass, and mixtures thereof.

9. The aqueous dispersed polymeric composition of Claim 8, wherein the hydrophobic compound is selected from the group consisting of butyric acid, hexanoic acid, octanoic acid, decanoic acid, dodecanoic acid, lauric acid, myristic acid, palmitic acid, oleic acid, linoleic acid, stearic acid, linolenic acid, gum rosin, wood rosin, tall oil rosin, abietic acid, oxidized polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers, ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid, fumaric acid, acrylic acid, and salts thereof.

10. The aqueous dispersed polymeric composition of Claim 9, wherein the aqueous dispersed polymeric material is a polyurethane dispersion, the treated inorganic filler is stearic acid-treated calcium carbonate.

11. A kit for preparing a spill resistant carpet backing comprising:

- a. an aqueous dispersed polymeric material;
- b. an inorganic filler; and
- c. a hydrophobic compound selected from the group consisting of a hydrophobic acid, a salt of a hydrophobic acid, and mixtures thereof.

12. The kit of Claim 11, wherein the aqueous dispersed polymeric material is selected from the group consisting of a polyurethane dispersion, a styrene-butadiene latex, a butadiene-acrylonitrile latex, an ethylene-vinyl acetate latex, a styrene-butadiene-butyl acrylate latex, a chloroprene latex, a polyethylene copolymer latex, an ethylene-

styrene latex, a styrene-butadiene-vinylidene chloride latex, a styrene-alkyl acrylate latex, a vinyl latex, an acrylic latex, and mixtures thereof.

13. The kit of Claim 12, wherein the inorganic filler is selected from the group consisting of calcium carbonate, calcium sulfate, kaolin, lignite fly ash, silica, talc, feldspar, mica, glass spheres, wollastonite, aluminum trihydrate, aluminum oxide, fiber glass, and mixtures thereof.

14. The kit of Claim 13, wherein the hydrophobic compound is selected from the group consisting of butyric acid, hexanoic acid, octanoic acid, decanoic acid, dodecanoic acid, lauric acid, myristic acid, palmitic acid, oleic acid, linoleic acid, stearic acid, linolenic acid, gum rosin, wood rosin, tall oil rosin, abietic acid, oxidized polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers, ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid, fumaric acid, acrylic acid, and salts thereof.

15. A kit for preparing a spill resistant carpet backing comprising:

- a. an aqueous dispersed polymeric material; and
- b. a treated inorganic filler, having been treated with a hydrophobic compound selected from the group consisting of a hydrophobic acid, a salt of a hydrophobic acid, and mixtures thereof.

16. The kit of Claim 15, wherein the aqueous dispersed polymeric material is selected from the group consisting of a polyurethane dispersion, a styrene-butadiene latex, a butadiene-acrylonitrile latex, an ethylene-vinyl acetate latex, a styrene-butadiene-

butyl acrylate latex, a chloroprene latex, a polyethylene copolymer latex, an ethylene-styrene latex, a styrene-butadiene-vinylidene chloride latex, a styrene-alkyl acrylate latex, a vinyl latex, an acrylic latex, and mixtures thereof.

17. The kit of Claim 16, wherein the inorganic filler is selected from the group consisting of calcium carbonate, calcium sulfate, kaolin, lignite fly ash, silica, talc, feldspar, mica, glass spheres, wollastonite, aluminum trihydrate, aluminum oxide, fiber glass, and mixtures thereof.

18. The kit of Claim 17, wherein the hydrophobic compound is selected from the group consisting of butyric acid, hexanoic acid, octanoic acid, decanoic acid, dodecanoic acid, lauric acid, myristic acid, palmitic acid, oleic acid, linoleic acid, stearic acid, linolenic acid, gum rosin, wood rosin, tall oil rosin, abietic acid, oxidized polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers, ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid, fumaric acid, acrylic acid, and salts thereof.

19. A method for preparing a spill resistant carpet backing comprising:

- a. mixing an inorganic filler with an aqueous dispersed polymeric material; and
- b. admixing a hydrophobic compound selected from the group consisting of a hydrophobic acid, a salt of a hydrophobic acid, and mixtures thereof.

20. The method of Claim 19, wherein the aqueous dispersed polymeric material is selected from the group consisting of a polyurethane dispersion, a styrene-butadiene latex, a butadiene-acrylonitrile latex, an ethylene-vinyl acetate latex, a styrene-

butadiene-butyl acrylate latex, a chloroprene latex, a polyethylene copolymer latex, an ethylene-styrene latex, a styrene-butadiene-vinylidene chloride latex, a styrene-alkyl acrylate latex, a vinyl latex, an acrylic latex, and mixtures thereof.

21. The method of Claim 20, wherein the inorganic filler is selected from the group consisting of calcium carbonate, calcium sulfate, kaolin, lignite fly ash, silica, talc, feldspar, mica, glass spheres, wollastonite, aluminum trihydrate, aluminum oxide, fiber glass, and mixtures thereof.

22. The method of Claim 21, wherein the hydrophobic compound is selected from the group consisting of butyric acid, hexanoic acid, octanoic acid, decanoic acid, dodecanoic acid, lauric acid, myristic acid, palmitic acid, oleic acid, linoleic acid, stearic acid, linolenic acid, gum rosin, wood rosin, tall oil rosin, abietic acid, oxidized polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers, ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid, fumaric acid, acrylic acid, and salts thereof.

23. A spill resistant carpet backing prepared in accordance with Claim 22.

24. The spill resistant carpet backing of Claim 23, wherein the spill resistant carpet backing is a carpet layer selected from the group consisting of a precoat, a laminate layer, and a foam layer.

25. A method for preparing a spill resistant carpet backing comprising:

- a. treating an inorganic filler with a hydrophobic compound selected from the group consisting of a hydrophobic acid, a salt of a hydrophobic acid, and

- 4 mixtures thereof; and
- 5 b. mixing the treated inorganic filler with an aqueous dispersed polymeric
- 6 material.
- 1 26. The method of Claim 25, wherein the aqueous dispersed polymeric material is
- 2 selected from the group consisting of a polyurethane dispersion, a styrene-butadiene
- 3 latex, a butadiene-acrylonitrile latex, an ethylene-vinyl acetate latex, a styrene-
- 4 butadiene-butyl acrylate latex, a chloroprene latex, a polyethylene copolymer latex, an
- 5 ethylene-styrene latex, a styrene-butadiene-vinylidene chloride latex, a styrene-alkyl
- 6 acrylate latex, a vinyl latex, an acrylic latex, and mixtures thereof.
- 1 27. The method of Claim 26, wherein the inorganic filler is selected from the group
- 2 consisting of calcium carbonate, calcium sulfate, kaolin, lignite fly ash, silica, talc,
- 3 feldspar, mica, glass spheres, wollastonite, aluminum trihydrate, aluminum oxide,
- 4 fiber glass, and mixtures thereof.
- 1 28. The method of Claim 27, wherein the hydrophobic compound is selected from the
- 2 group consisting of butyric acid, hexanoic acid, octanoic acid, decanoic acid,
- 3 dodecanoic acid, lauric acid, myristic acid, palmitic acid, oleic acid, linoleic acid,
- 4 stearic acid, linolenic acid, gum rosin, wood rosin, tall oil rosin, abietic acid, oxidized
- 5 polyethylene containing carboxylic acid groups, ethylene-acrylic acid copolymers,
- 6 ethylene-methacrylic acid copolymers, polyolefins grafted with unsaturated
- 7 carboxylic acids, polyolefins grafted with anhydrides, methacrylic acid, maleic acid,
- 8 fumaric acid, acrylic acid, and salts thereof.
- 1 29. A spill resistant carpet backing prepared in accordance with Claim 28.

- 1 30. The spill resistant carpet backing of Claim 29, wherein the spill resistant carpet
2 backing is a carpet layer selected from the group consisting of a precoat, a laminate
3 layer, and a foam layer.